

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 121, 125

[Docket No. FAA-2000-7830; Amendment Nos. 121-278 & 125-34]

RIN 2120-AH08

Revisions to Digital Flight Data Recorder Requirements for Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: This action amends the flight data recorder regulations by adding language to allow certain Airbus airplanes to record certain data parameters using resolution requirements that differ slightly from the current regulation. This amendment is necessary because the Airbus airplanes are unable to record certain flight parameters under the existing criteria without undergoing unintended and expensive retrofit.

DATES: This final rule is effective August 18, 2000.

Comments must be submitted on or before September 25, 2000.

ADDRESSES: Comments on this final rule should be mailed or delivered, in duplicate to: U.S. Department of Transportation Dockets, Docket No. FAA-2000-7830, 400 Seventh Street, SW, Room Plaza 401, Washington, DC 20590. You may also submit comments through the internet to <http://dms.dot.gov>. You may review the public docket containing comments to these proposed regulations in person in the Dockets Office between 9:00 a.m. and 5:00 p.m., Monday through Friday, except Federal holidays. The Dockets Office is on the plaza level of the NASSIF Building at the Department of Transportation at the above address. Also, you may review public dockets on the Internet at <http://dms.dot.gov>.

FOR FURTHER INFORMATION CONTACT: Gary E. Davis, Air Transportation Division (AFS-201), Flight Standards Service, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591, telephone (202) 267-8166.

SUPPLEMENTARY INFORMATION

Comments Invited

This final rule is being adopted without prior notice and prior public comment. The Regulatory Policies and Procedures of the Department of Transportation (DOT) (44 FR 1134; February 26, 1979), however, provide that, to the maximum extent possible, operating administrations for the DOT should provide an opportunity for public comment on regulations issued without prior notice. Accordingly, interested persons are invited to participate in this rulemaking by submitting such written data, views, or arguments, as they may desire. Comments relating to environmental, energy, federalism, or international trade impacts that might result from this amendment also are invited. Comments must include the regulatory docket or amendment number and must be submitted in duplicate to the address above. All comments received, as well as a report summarizing each substantive public contact with FAA personnel on this rulemaking, will be filed in the public docket. The docket is available for public inspection before and after the comment closing date.

The FAA will consider all comments received on or before the closing date for comments. Late filed comments will be considered to the extent practicable. This final rule may be amended in light of the comments received.

Commenters who want the FAA to acknowledge receipt of their comments submitted in response to this final rule must include a preaddressed, stamped postcard with those comments on which the following statement is made: "Comments to Docket No. FAA-2000-7830. The postcard will be date-stamped by the FAA and mailed to the commenter.

Availability of Final Rule

An electronic copy of this document may be downloaded using a modem and suitable communications software from the FAA regulations section of the Fedworld electronic bulletin board service (telephone: (703) 321-3339), or the Government Printing Office's (GPO) electronic bulletin board service (telephone: (202) 512-1661).

Internet users may reach the FAA's web page at <http://www.faa.gov/avr/arm/nprm/nprm.htm>, or the Government Printing Office's webpage

at <http://www.access.gpo.gov/nara> for access to recently published rulemaking documents.

Any person may obtain a copy of this final rule by submitting a request to the Federal Aviation Administration, Office of Rulemaking, ARM-1, 800 Independence Avenue, SW, Washington, DC 20591, or by calling (202) 267-9680. Communications must identify the notice number or docket number of this rule.

Persons interested in being placed on the mailing list for future rulemaking documents should request from the above office a copy of Advisory Circular No. 11-2A, Notice of Proposed Rulemaking Distribution System, that describes the application procedure.

Small Business Regulatory Enforcement Fairness Act

The Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996, requires the FAA to comply with small entity requests for information or advice about compliance with statutes and regulations within its jurisdiction. Therefore, any small entity that has a question regarding this document may contact their local FAA official. Internet users can find additional information on SBREFA on the FAA's web page at <http://www.faa.gov/avr/arm/sbrefa.htm> and may send electronic inquiries to the following Internet address: 9-AWA-SBREFA@faa.gov.

BACKGROUND

Statement of the Problem

After the amendments to the DFDR requirements became effective on August 18, 1997 (62 FR 38362), the FAA began receiving telephone inquiries, requests for meetings, and petitions for exemption from Airbus Industrie (Airbus) concerning the economic impact of the amendments on certain Airbus airplanes. Airbus claimed that in order to comply with the new DFDR recording requirements of 14 CFR Appendix M, its A300 B2/B4 series, A318/A319/A320/A321 series, and its A330/A340 series airplanes would have to undergo major equipment retrofits. During the rulemaking, the FAA had stated that the rule was being tailored to avoid major equipment retrofits.

The digital flight data recorders (DFDRs) in the affected Airbus airplanes already record the required parameters, but some of the resolution and sampling intervals for certain parameters differ slightly from those required by Appendix M. Airbus noted this difference in its comment to the NPRM, but the comment was not fully addressed in the preamble to the final rule, issued in August 1997.

History of amendments to DFDR requirements

On February 22, 1995, the NTSB recommended that the FAA require upgrades of the flight data recorders installed on certain airplanes to record certain additional parameters not required by the current regulations. Two of the recommendations made by the NTSB affected the subject Airbus airplanes:

Recommendation No. A-95-26. Amend, by December 31, 1995, 14 CFR §§121.343, 125.225, and 135.152 to require that Boeing 727 airplanes, Lockheed L-1011 airplanes, and all transport category airplanes operated under 14 CFR Parts 121, 125, or 135 whose type certificates apply to airplanes still in production, be equipped to record on a flight data recorder system, as a minimum, the parameters listed in "Proposed Minimum FDR Parameter Requirements for Airplanes in Service" plus any other parameters required by current regulations applicable to each individual airplane. Specify that the airplanes be so equipped by January 1, 1998, or by the later date when they meet Stage 3 noise requirements but, regardless of Stage 3 compliance status, no later than December 31, 1999. (Classified as Class II, Priority Action)

Recommendation No. A-95-27. Amend, by December 31, 1995, 14 CFR 121.343, 125.225, and 135.152 to require that all airplanes operated under 14 CFR Parts 121, 125, or 135, having 10 or more seats, and for which an original airworthiness certificate is received after December 31, 1996, record the parameters listed in "Proposed FDR Enhancements for Newly Manufactured Airplanes" on a flight data recorder having at least a 25-hour recording capacity. (Classified as Class II, Priority Action)

Notice of Proposed Rulemaking

On July 16, 1996, the FAA published a notice of proposed rulemaking (NPRM) (Notice No. 96-7, 61 FR 37143) addressing revisions to DFDR rules. The proposals

were based on the NTSB recommendations, information obtained through a public hearing, and the efforts of the Aviation Rulemaking Advisory Committee.

As part of its comment to the proposed rule, Airbus stated that there were current recorder systems that record the required parameters at sampling rates or resolutions that differ from the proposed Appendix M. Airbus commented that the rates and resolutions be changed since meeting them would impose significant retrofit costs on operators of Airbus airplanes. It was not until Airbus petitioned for exemption from the Appendix M requirements that FAA focused its attention on its response to the Airbus comment, the significant number of Airbus airplanes involved, and the minor variations that would be required from Appendix M requirements. As stated previously, it was never the intention of the FAA to require operators of any airplanes to incur significant equipment retrofit costs in order to comply with the requirements for DFDR upgrades.

The FAA believes that had it fully understood the overall impact the final rule would place on operators of Airbus airplanes, it would have made specific provisions to reduce or eliminate that impact in the final rule.

Petitions for Exemption and Rulemaking

On April 9, 1998, Airbus petitioned the FAA, on behalf of operators of Airbus aircraft, for permanent exemptions from part 121, Appendix M, and Part 125, Appendix E. Airbus requested that the A318/A319/320/321 series aircraft and A330/A340 series aircraft be exempted from the recording resolution requirements and be allowed to record alternatives for several parameters. On August 24, 1999, FAA published a final rule (64 FR 46117) addressing those requests, which have been incorporated into the Appendices to Part 121 and Part 125 as a series of 13 footnotes.

In a letter dated May 24, 2000, Airbus filed a petition for rulemaking that requested correction of an additional parameter (parameter 9 Thrust/power of each engine—primary flight crew reference) that it had inadvertently left off the petition for exemption (Docket Number 30065). Airbus also requested minor changes to the recording requirements for parameter 37 (drift angle), parameter 42 (Power lever

angle), and parameter 57 (Thrust command, for International Aero Engines only). Airbus submitted additional information on August 3, 2000, regarding parameter values. In its petition, Airbus stated that current Airbus A318, A319, A320, A321, A330, and A340 series airplanes are equipped with a digital flight data recording system (DFDRS) that records all mandatory parameters, numbers 1 through 88. Airbus further stated that, in order to appropriately revise the resolution and sampling requirements of Appendix M to Part 121 and Appendix E to Part 125, specific additional changes are needed as follows:

For A330/A340 series aircraft:

Parameter 9, Thrust/Power of each engine—primary flight crew reference: Exhaust Pressure Ratio (EPR) Actual (A330 with Pratt and Whitney Engines), is required to have a resolution of 0.2% by the present regulation and is implemented as 0.22%;

Parameter 9, Thrust/Power of each engine—primary flight crew reference: EPR Actual (A330 with Rolls Royce engines), is required to have a resolution of 0.2% by the present regulation and is implemented as .29%;

Parameter 37, Drift Angle, is required to have a resolution of 0.1 degrees by the present regulation, and is implemented as 0.352 degrees;

Parameter 42, Throttle/power lever position (A330/340 Series), is required to have a resolution of 2% by the present regulation, and is implemented as 3.27% of full range for throttle lever angle (TLA); for reverse thrust, reverse throttle lever angle (RLA) resolution is nonlinear over the active reverse thrust range, which is 51.54 degrees to 96.14 degrees. The resolved element is 2.8 degrees uniformly over the entire active reverse thrust range, or 2.9% of the full range value of 96.14 degrees;

For A318/A319/320/321 series aircraft:

Parameter 42, Throttle/power lever position, is required to have a resolution of 2%, but is implemented as 4.32% of full range;

Parameter 57, Thrust command (EPR, for International Aero Engines only) is required to have a resolution of 2%, but is implemented at 2.58%.

FAA Determinations

The FAA has previously determined that it would not be appropriate to grant an exemption to Airbus on behalf of the operators of its aircraft. Even if exemptions were granted to individual operators, they would have to be permanent. The FAA has determined that, under such circumstances, a change to the rule language of Appendix M is the only appropriate means to account for the differences in some DFDR equipment. Accordingly, the FAA is amending part 121 Appendix M, and Part 125 Appendix E to indicate that certain airplanes may continue to record the indicated parameters using the rates and resolutions listed. It is the FAA's understanding that this amendment will apply to Airbus aircraft. The FAA consulted informally with the NTSB concerning this variation, and the NTSB indicated that the proposed change would not significantly affect its ability to investigate accidents or incidents.

The FAA has determined that these changes will not adversely affect the safety of the aircraft, hinder the investigation of accidents or incidents by the NTSB, nor compromise the intent of the DFDR rules. This amendment will revise the resolution recording requirements of parameters 9, 37, 42 and 57. The FAA has determined that these changes can be accommodated by footnotes in Appendix M to part 121 and Appendix E to part 125.

Good Cause for Immediate Adoption

Sections 553(b)(3)(B) and 553 (d)(3) of the Administrative Procedure Act (APA) (5 U.S.C. Sections 553(b)(3)(B) and 553(d)(3)) authorize agencies to dispense with certain notice procedures for rules when they find "good cause" to do so. Under section 553(b)(3)(B), the requirements of notice and opportunity for comment do not apply when the agency for good cause finds that those procedures are "impracticable, unnecessary, or contrary to the public interest." Section 553(d)(3) allows an agency, upon finding good cause, to make a rule effective immediately, thereby avoiding the 30-day delayed effective date requirement in section 553.

The FAA finds that notice and public comment to this final rule are impracticable, unnecessary, and contrary to the public interest. This final rule amends the flight data recorder regulations by adding language to the appendices of parts 121 and 125 to allow certain airplanes to record certain data parameters using resolution and sampling requirements that differ slightly from the current regulation. As a result, the FAA has determined that notice and public comment are unnecessary because the change effectuates the original intent of the regulation, is not controversial, and is unlikely to result in adverse comments.

Executive Order 12866 and DOT Regulatory Policies and Procedures

Executive Order 12866, Regulatory Planning and Review, directs the FAA to assess both the costs and benefits of a regulatory change. The FAA is not allowed to propose or adopt a regulation unless a reasoned determination is made that the benefits of the intended regulation justify the costs. The FAA's assessment has determined that there are no costs associated with this final rule. Since its costs and benefits do not make it a "significant regulatory action" as defined in the order, the FAA has not prepared a "regulatory evaluation," which is the written cost/benefit analysis ordinarily required for all rulemaking documents under the DOT Regulatory Policies and Procedures. The FAA does not need to do the latter analysis where the economic impact of a final rule is minimal.

The FAA has determined that there are no costs associated with this final rule; the rule imposes no costs upon operators. Instead, this rule change relieves operators from a regulatory burden that was inadvertently imposed on them in the adoption of the 1997 regulations, and would have an impact beginning August 18, 2000. This change effectuates the original intent of the 1997 regulations.

Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) establishes "as a principle of regulatory issuance that agencies shall endeavor, consistent with the objective of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the businesses, organizations, and governmental jurisdictions subject

to regulation." To achieve that principle, the RFA requires agencies to solicit and consider flexible regulatory proposals and to explain the rationale for their actions. The RFA covers a wide-range of small entities, including small businesses, not-for-profit organizations and small governmental jurisdictions.

Agencies must perform a review to determine whether a proposed or final rule will have a significant economic impact on a substantial number of small entities. If the determination is that it will, the agency must prepare a regulatory flexibility analysis (RFA) as described in the RFA.

However, if an agency determines that a proposed or final rule is not expected to have a significant economic impact on a substantial number of small entities, section 605(b) of the 1980 act provides that the head of the agency may so certify and an RFA is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

The FAA has determined that there are no costs associated with this final rule. Accordingly, pursuant to the Regulatory Flexibility Act, 5 U.S.C. 605(b), the Federal Aviation Administration certifies that this proposed rule will not have a significant economic impact on a substantial number of small entities.

International Trade Impact Analysis

The Trade Agreement Act of 1979 prohibits Federal agencies from engaging in any standards or related activities that create unnecessary obstacles to the foreign commerce of the United States. Legitimate domestic objectives, such as safety, are not considered unnecessary obstacles. The statute also requires consideration of international standards and where appropriate, that they be the basis for U.S. standards. In addition, consistent with the Administration's belief in the general superiority and desirability of free trade, it is the policy of the Administration to remove or diminish to the extent feasible, barriers to international trade, including both barriers affecting the export of American goods and services to foreign countries and barriers affecting the import of foreign goods and services into the United States.

In accordance with the above statute and policy, the FAA has assessed the potential effect of this final rule and has determined that it will impose little or no costs on domestic and international entities and thus has a neutral trade impact.

Unfunded Mandates

The Unfunded Mandates Reform Act of 1995 (the Act), enacted as Pub. L. 104-4 on March 22, 1995, is intended, among other things, to curb the practice of imposing unfunded Federal mandates on State, local, and tribal governments.

Title II of the Act requires each Federal agency to prepare a written statement assessing the effects of any Federal mandate in a proposed or final agency rule that may result in a \$100 million or more expenditure (adjusted annually for inflation) in any one year by State, local, and tribal governments, in the aggregate, or by the private sector; such a mandate is deemed to be a "significant regulatory action."

This rule does not contain a Federal intergovernmental or private sector mandate that exceeds \$100 million a year.

Executive Order 13132, Federalism

The FAA has analyzed this final rule under the principles and criteria of executive Order 13132, Federalism. The FAA has determined that this action will not have a substantial direct effect on the states, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, the FAA has determined that this final rule will not have federalism implications.

Paperwork Reduction Act

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)), the FAA has determined that there are no requirements for information collection associated with this final rule.

Environmental Analysis

FAA Order 1050.1D defines FAA actions that may be categorically excluded from preparation of a National Environmental Policy Act (NEPA) environmental assessment or

environmental impact statement. In accordance with FAA Order 1050.1D, Appendix 4, paragraph 4(j), this rulemaking action qualifies for a categorical exclusion.

Energy Impact

The energy impact of the rule has been assessed in accordance with the Energy Policy and Conservation Act (EPCA) and Public Law 94-163, as amended (43 U.S.C. 6362) and FAA Order 1053.1. It has been determined that the rule is not a major regulatory action under the provisions of the EPCA.

List of Subjects

14 CFR Part 121

Air carriers, Aviation safety, Reporting and record keeping requirements,
Transportation

14 CFR Part 125

Aircraft, Airmen, Aviation safety, Reporting and record keeping requirements

The Amendment

Accordingly, the Federal Aviation Administration amends parts 121 and 125 of Chapter 1 of Title 14 of the Code of Federal Regulations as follows:

PART 121--OPERATING REQUIREMENTS: DOMESTIC, FLAG, AND SUPPLEMENTAL OPERATIONS

1. The authority citation for part 121 continues to read as follows:

Authority: 49 USC. 106(g), 40113, 40119, 44101, 44701-44702, 44705, 44709-44711, 44713, 44716-44717, 44722, 44901, 44903-44904, 44912, 46105.

2. In Appendix M, the title of the Appendix, and item numbers 9, 37, 42, and 57 are revised to read as follows:

APPENDIX M TO PART 121 -- AIRPLANE FLIGHT RECORDER SPECIFICATIONS

The recorded values must meet the designated range, resolution, and accuracy requirements during dynamic and static conditions. All data recorded must be correlated in time to within one second.

Parameters	Range	Accuracy (sensor input)	Seconds per sampling interval	Resolution	Remarks
9. Thrust/power on each engine—primary flight crew reference ¹⁴	* * *	* * *	* * *	* * *	* * *
* * *	* * *	* * *	* * *	* * *	* * *
37. Drift Angle ¹⁵	* * *	* * *	* * *	* * *	* * *
* * *	* * *	* * *	* * *	* * *	* * *
42. Throttle/Power Lever Position ¹⁶	* * *	* * *	* * *	* * *	* * *
* * *	* * *	* * *	* * *	* * *	* * *
57. Thrust Command ¹⁷	* * *	* * *	* * *	* * *	* * *

¹⁴ For A330 Airplanes with PW or RR Engines, resolution = .29%

¹⁵ For A330/A340 series airplanes, resolution = 0.352 degrees.

¹⁶ For A318/A319/A320/A321 series airplanes, resolution = 4.32%. For A330/A340 series airplanes, resolution is 3.27% of full range for throttle lever angle (TLA); for reverse thrust, reverse throttle lever angle (RLA) resolution is nonlinear over the active reverse thrust range, which is 51.54 degrees to 96.14 degrees. The resolved element is 2.8 degrees uniformly over the entire active reverse thrust range, or 2.9% of the full range value of 96.14 degrees.

¹⁷ For A318/A319/A320/A321 series airplanes, with IAE engines, resolution = 2.58%.

Part 125--CERTIFICATION AND OPERATIONS: AIRPLANES HAVING A SEATING CAPACITY OF 20 OR MORE PASSENGERS OR A MAXIMUM PAYLOAD CAPACITY OF 6,000 POUNDS OR MORE

3. The authority citation for Part 125 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701-44702, 44705, 44710-44711, 44713, 44716-44717, 4472

4. In Appendix E, the title of the Appendix, and item numbers 9, 37, 42, and 57 are revised to read as follows:

APPENDIX E TO PART 125 -- AIRPLANE FLIGHT RECORDER SPECIFICATIONS

The recorded values must meet the designated range, resolution, and accuracy requirements during dynamic and static conditions. All data recorded must be correlated in time to within one second.

Parameters	Range	Accuracy (sensor input)	Seconds per sampling interval	Resolution	Remarks
9. Thrust/power on each engine—primary flight crew reference ¹⁴	* * *	* * *	* * *	* * *	* * *
* * *	* * *	* * *	* * *	* * *	* * *
37. Drift Angle ¹⁵	* * *	* * *	* * *	* * *	* * *
* * *	* * *	* * *	* * *	* * *	* * *
42. Throttle/ Power Lever Position ¹⁶	* * *	* * *	* * *	* * *	* * *
* * *	* * *	* * *	* * *	* * *	* * *
57. Thrust Command ¹⁷	* * *	* * *	* * *	* * *	* * *

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¹⁷ For A318/A319/A320/A321 series airplanes, with IAE engines, resolution = 2.58%.

Issued in Washington, DC, on August 18, 2000

/s/

Jane F. Garvey
Administrator

